

[illegible]

```
000000  UU  UU  TTTTTTTTTT  PPPPPPPP  UU  UU  TTTTTTTTTT
000000  UU  UU  TTTTTTTTTT  PPPPPPPP  UU  UU  TTTTTTTTTT
00  00  UU  UU  TT  PP  PP  UU  UU  TT
00  00  UU  UU  TT  PP  PP  UU  UU  TT
00  00  UU  UU  TT  PP  PP  UU  UU  TT
00  00  UU  UU  TT  PP  PP  UU  UU  TT
00  00  UU  UU  TT  PP  PP  UU  UU  TT
00  00  UU  UU  TT  PP  PP  UU  UU  TT
00  00  UU  UU  TT  PP  PP  UU  UU  TT
00  00  UU  UU  TT  PP  PP  UU  UU  TT
00  00  UU  UU  TT  PP  PP  UU  UU  TT
000000  UUUUUUUUUU  TT  PP  UUUUUUUUUU  TT  ....
000000  UUUUUUUUUU  TT  PP  UUUUUUUUUU  TT  ....
                                ....
```

```
LL  IIIIII  SSSSSSSS
LL  IIIIII  SSSSSSSS
LL  II  SS
LL  II  SS
LL  II  SS
LL  II  SS
LL  II  SSSSSS
LL  II  SSSSSS
LL  II  SS
LL  II  SS
LL  II  SS
LL  II  SS
LLLLLLLLLL  IIIIII  SSSSSSSS
LLLLLLLLLL  IIIIII  SSSSSSSS
```

```
0001 0 MODULE OUTPUT ( %TITLE 'Print Symbiont -- output routines'
0002 0 IDENT = 'V04-000'
0003 0 ADDRESSING_MODE (EXTERNAL = GENERAL)
0004 0 ) =
0005 1 BEGIN
0006 1
0007 1
0008 1 *****
0009 1 *
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0027 1 *
0028 1 *
0029 1 *****
0030 1
0031 1
0032 1 ++
0033 1 FACILITY:
0034 1 Print Symbiont.
0035 1
0036 1 ABSTRACT:
0037 1 Output routines.
0038 1
0039 1 ENVIRONMENT:
0040 1 VAX/VMS user mode.
0041 1 --
0042 1
0043 1 AUTHOR: G. Robert, CREATION DATE: 31-Aug-1982
0044 1
0045 1 MODIFIED BY:
0046 1
0047 1 3B-006 RRB3006 Rowland R. Bradley 24-Jul-1984
0048 1 Add routine headers.
0049 1
0050 1 3B-005 GRR3005 Gregory R. Robert 29-Apr-1984
0051 1 FT2 bugfixes. Accept explicit OPEN/CLOSE calls instead
0052 1 of relying upon START_TASK.
0053 1
0054 1 3B-004 RRB3004 Rowland R. Bradley 27-Apr-1984
0055 1 Add support for storage, initialization, and ultimate
0056 1 display of the entire device name.
0057 1
```


OUTPUT
V04-000

Print Symbiont -- output routines

F 11
16-Sep-1984 02:21:40 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:55:12 [PRTSMB.SRC]OUTPUT.B32;1

Page 2
(1)

58	0058	1	3B-003	GRR3003	Gregory R. Robert	23-Aug-1983
59	0059	1		Bugfixes, page_setup_modules, form_setup_modules,		
60	0060	1		sheet_feed, symbiont-initiated pause_task and stop_stream,		
61	0061	1		hangup code, read and write item services		
62	0062	1				
63	0063	1	3B-002	GRR3002	Gregory R. Robert	03-Aug-1983
64	0064	1		Rewrite for new design.		
65	0065	1				
66	0066	1	3B-001	GRR3001	Gregory R. Robert	23-Jul-1983
67	0067	1		Created new module.		
68	0068	1				
69	0069	1				
70	0070	1				

OUTPUT
V04-000

Print Symbiont -- output routines

G 11
16-Sep-1984 02:21:40
14-Sep-1984 12:55:12

VAX-11 Bliss-32 V4.0-742
[PRTSMB.SRC]OUTPUT.B32;1

Page 3
(2)

```
: 72      0071 1 LIBRARY 'SYS$LIBRARY:LIB';
: 73      0072 1 REQUIRE 'LIB$:SMBDEF';
: 74      0564 1 REQUIRE 'SRC$:SMBREQ';
: 75      1021 1
: 76      1022 1 EXTERNAL ROUTINE
: 77      1023 1     PSM$REPORT,
: 78      1024 1     SMB$SEND TO JOBCTL,
: 79      1025 1     PSM$STORE_ERRORS
: 80      1026 1     ;
: 81      1027 1
: 82      1028 1 EXTERNAL
: 83      1029 1     PSM$HANGUP_DISPATCH_TABLE
: 84      1030 1     ;
: 85      1031 1
: 86      1032 1
: 87      1033 1 FORWARD ROUTINE
: 88      1034 1     PSM$OUTPUT      :
: 89      1035 1     START_PRINTER  :
: 90      1036 1     STOP_PRINTER   :
: 91      1037 1     WRITE_AST      : NOVALUE
: 92      1038 1     ;
: 93      1039 1
```

OUT
V04

: R

```

95 1040 1 %SBTTL 'PSM$OUTPUT'
96 1041 1 Functional Description:
97 1042 1 ?desc
98 1043 1
99 1044 1 Formal Parameters:
100 1045 1 ?desc
101 1046 1 Implicit Inputs:
102 1047 1 none
103 1048 1
104 1049 1 Implicit Outputs:
105 1050 1 none
106 1051 1
107 1052 1 Returned Value:
108 1053 1 none
109 1054 1
110 1055 1 Side Effects:
111 1056 1 none
112 1057 1 --
113 1058 1 GLOBAL ROUTINE PSM$OUTPUT (
114 1059 1     SMB_CONTEXT      : REF $LONGWORD,
115 1060 1     USER_CONTEXT   : REF VECTOR,
116 1061 1     FUNCTION       : REF $LONGWORD,
117 1062 1     FUNC_DESC      : REF VECTOR,
118 1063 1     FUNC_ARG       : REF $LONGWORD
119 1064 1 ) =
120 1065 2 BEGIN
121 1066 2
122 1067 2 SELECTONEU .FUNCTION[] OF
123 1068 2 SET
124 1069 2
125 1070 2 [PSM$K_WRITE, PSM$K_WRITE_NOFORMAT]:
126 1071 2 BEGIN
127 1072 2 LOCAL IO_FUNC : INITIAL (IO$_WRITEBLK);
128 1073 2 LOCAL SIZE, ADDRESS;
129 1074 2
130 1075 2 BIND IOB = .SMB_CONTEXT[] : $BBLOCK;
131 1076 2 BIND SCB = .IOB[IOB_A_CONTEXT] : $BBLOCK;
132 1077 2
133 1078 2 ! If device was hungup then mark it unavailable and request stop stream
134 1079 2 !
135 1080 2 IF TESTBITSC (SCB[PSM$V_HANGUP])
136 1081 2 THEN
137 1082 2 BEGIN
138 1083 2     SCB[PSM$L_DEVICE_STATUS] = .SCB[PSM$L_DEVICE_STATUS] OR
139 1084 2     (SMBMSG$M_UNAVAILABLE OR SMBMSG$M_STOP_STREAM);
140 1085 2     RETURN SS$_HANGUP;
141 1086 2 END;
142 1087 2
143 1088 2 IF .FUNCTION[] EQL PSM$K_WRITE_NOFORMAT
144 1089 2 THEN
145 1090 2     IF .SCB[PSM$L_DEVICE_CLASS] EQL DC$_TERM
146 1091 2     THEN
147 1092 2         IO_FUNC = IO$_WRITEBLK OR IO$_NOFORMAT
148 1093 2     ELSE
149 1094 2         IO_FUNC = IO$_WRITEPBLK;
150 1095 2
151 1096 2 STR$ANALYZE_SDESC_R1 (.FUNC_DESC; SIZE, ADDRESS);

```



```

152      1097
153      P 1098      RETURN IF_ERROR_ ($QIO (
154      P 1099      FUNC      = .IO_FUNC,
155      P 1100      CHAN      = .SCB[PSM$L_CHANNEL],
156      P 1101      IOSB      = IOB[IOB_Q_IOSB],
157      P 1102      ASTADR      = WRITE_AST,
158      P 1103      ASTPRM      = IOB,
159      P 1104      P1      = .ADDRESS,
160      1105      P2      = .SIZE));
161      1106      END;
162      1107
163      [PSM$K_START_TASK]:
164      1109      BEGIN
165      1110      BIND SCB = .SMB_CONTEXT[] : $BBLOCK;
166      1111      LOCAL BUFFER : $BBLOCK [8];
167      1112      LOCAL DEVBUFSIZ : VOLATILE;
168      1113      LOCAL ITEM_LIST : $ITMLST_DECL (ITEMS=2);
169      1114
170      P 1115      $ITMLST_INIT (ITMLST=ITEM_LIST,
171      P 1116      (BUFADR=BUFFER+4, ITMCD=DVIS_DEVDEPEND OR DVISC_SECONDARY),
172      1117      (BUFADR=DEVBUFSIZ, ITMCD=DVIS_DEVBUFSIZ OR DVISC_SECONDARY));
173      1118
174      P 1119      RETURN IF_ERROR_ ($GETDVIW
175      1120      (CHAN=.SCB[PSM$L_CHANNEL], ITMLST=ITEM_LIST));
176      1121
177      1122      ! Set the page length so the driver can compute number of line
178      1123      ! feeds for devices lacking mechanical form feed -- preserve the
179      1124      ! class type and width information.
180      1125
181      1126      BUFFER [0,0,08,0] = .SCB[PSM$L_DEVICE_CLASS];
182      1127      BUFFER [1,0,08,0] = .SCB[PSM$L_DEVICE_TYPE];
183      1128      BUFFER [2,0,16,0] = .DEVBUFSIZ;
184      1129      BUFFER [7,0,08,0] = .SCB[PSM$L_FORM_LENGTH];
185      1130
186      P 1131      RETURN IF_ERROR_ ($QIOW
187      1132      (FUNC=IOS_SETMODE, CHAN=.SCB[PSM$L_CHANNEL], P1=BUFFER, P2=8));
188      1133
189      1134      RETURN SSS_NORMAL;
190      1135      END;
191      1136
192      [PSM$K_CLOSE]:
193      1138      BEGIN
194      1139      BIND SCB = .SMB_CONTEXT[] : $BBLOCK;
195      1140      RETURN STOP_PRINTER (SCB[PSM$L_CHANNEL], SCB[PSM$Q_DEVICE_NAME]);
196      1141      END;
197      1142
198      [PSM$K_OPEN]:
199      1144      BEGIN
200      1145      BIND SCB = .SMB_CONTEXT[] : $BBLOCK;
201      1146      LOCAL DEVDEPEND : $BBLOCK[8];
202      1147
203      P 1148      RETURN IF_ERROR_ (START_PRINTER (
204      P 1149      .FUNC_DESC,      ! - specified device name
205      P 1150      .FUNC_ARG,      ! - resultant device status
206      P 1151      SCB[PSM$L_CHANNEL],      ! - channel assigned
207      P 1152      SCB[PSM$L_DEVICE_CLASS],      ! - device class
208      P 1153      SCB[PSM$L_DEVICE_TYPE],      ! - device type

```

```

: 209      P 1154 3      .FUNC DESC,
: 210      P 1155 3      DEVDEPEND
: 211      1156 3      ));
: 212      1157 3
: 213      1158 3      IF .SCB[PSM$L_DEVICE_CLASS] EQL DC$_TERM
: 214      1159 3      THEN
: 215      1160 4      BEGIN
: 216      1161 4      IF NOT .DEVDEPEND[TT$V_MECHTAB]
: 217      1162 4      THEN
: 218      1163 4      SCB[PSM$V_EXPAND_TABS] = 1;
: 219      1164 4
: 220      P 1165 4      RETURN IF_ERROR ($QIO (
: 221      P 1166 4      FUNC = IO$ SETMODE OR IO$M_CTRLVAST,
: 222      P 1167 4      CHAN = .SCB[PSM$L_CHANNEL];
: 223      P 1168 4      P1 = PSM$HANGUP_DISPATCH_TABLE +
: 224      P 1169 4      (.SCB[PSM$L_STREAM_INDEX] *
: 225      P 1170 4      PSM$HANGUP_DISPATCH_ENTRY),
: 226      1171 4      P2 = 0));
: 227      1172 4      END
: 228      1173 3      ELSE
: 229      1174 3      IF .SCB[PSM$L_DEVICE_TYPE] EQLU DT$_LP11
: 230      1175 4      AND (NOT .DEVDEPEND[PSV_TAB])
: 231      1176 3      THEN
: 232      1177 3      SCB[PSM$V_EXPAND_TABS] = 1;
: 233      1178 3
: 234      1179 3      RETURN SS$_NORMAL;
: 235      1180 2      END;
: 236      1181 2
: 237      1182 2      [PSM$K_CANCEL]:
: 238      1183 3      BEGIN
: 239      1184 3      BIND SCB = .SMB_CONTEXT[] : $BBLOCK;
: 240      1185 3      RETURN_IF_ERROR_ ($CANCEL (CHAN=.SCB[PSM$L_CHANNEL]));
: 241      1186 2      END;
: 242      1187 2
: 243      1188 2      [OTHERWISE]:
: 244      1189 2      RETURN PSM$_FUNNOTSUP;
: 245      1190 2
: 246      1191 2      TES;
: 247      1192 2
: 248      1193 2      PSM$_PENDING
: 249      1194 2
: 250      1195 1      END;

```

```

.TITLE OUTPUT Print Symbiont -- output routines
.IDENT \V04-000\

.EXTRN BAS$EDIT, LBR$CLOSE
.EXTRN LBR$GET_RECORD, LBR$INI_CONTROL
.EXTRN LBR$LOOKUP_KEY, LBR$OPEN
.EXTRN LBR$RET_RMSSTV, LBR$SET_LOCATE
.EXTRN LIB$TRIM_FILESPEC
.EXTRN LIB$GET_VM, LIB$FREE_VM
.EXTRN STR$ANALYZE_SDESC
.EXTRN STR$ANALYZE_SDESC_R1
.EXTRN STR$APPEND, STR$CONCAT
.EXTRN STR$COPY_DX, STR$COPY_R

```


				OFFC 00000				
56	00000000G	00	9E	00002	MOVAB	SYSSQIO, R6		
5E		28	C2	00009	SUBL2	#40, SP		
53	OC	BC	D0	0000C	MOVL	@FUNCTION, R3	1067	
09		53	D1	00010	CMPL	R3, #9	1070	
		63	1F	00013	BLSSU	4\$		
0A		53	D1	00015	CMPL	R3, #10		
		5E	1A	00018	BGTRU	4\$		
55		20	D0	0001A	MOVL	#32, IO_FUNC	1071	
54	04	BC	D0	0001D	MOVL	@SMB_CONTEXT, R4	1075	
52	14	A4	D0	00021	MOVL	20(R4), R2	1076	
OB	OC	A2	02	E5	BBCC	#2, 12(R2), 1\$	1080	
	54	A2	8F	88	BISB2	#160, 84(R2)	1084	
		50	02CC	8F	MOVZWL	#716, R0	1085	
				04	RET			
		0A	53	D1	CMPL	R3, #10	1088	
			15	12	BNEQ	3\$		
00000042		8F	01A0	C2	CMPL	416(R2), #66	1090	
				07	BNEQ	2\$		
		55	0120	8F	MOVZWL	#288, IO_FUNC	1092	
				03	BRB	3\$		
		55		0B	MOVL	#11, IO_FUNC	1094	
		50	10	AC	MOVL	FUNC_DESC, R0	1096	
				00	JSB	STR\$ANALYZE_SDESC_R1		
				00000000G	CLRQ	-(SP)	1105	
				7E	CLRQ	-(SP)		
				7E	PUSHL	SIZE		
				50	PUSHL	ADDRESS		
				51	PUSHL	R4		
				54	PUSHAB	WRITE_AST		
	0000V	CF	9F	00063	PUSHAB	12(R4)		
	OC	A4	9F	00067	PUSHL	IO_FUNC		
		55	DD	0006A	PUSHL	396(R2)		
				018C	CLRL	-(SP)		
				C2	CALLS	#12, SYSSQIO		
				7E				
66		OC	FB	00072				

```

.EXTRN STR$FREE1_DX, STR$FREE1_DX_R4
.EXTRN STR$GET1_DX, STR$LEFT
.EXTRN STR$PREFIX, STR$RIGHT
.EXTRN PSM$S_HANGUP_DISPATCH_ENTRY
.EXTRN PSM$_BUFFEROVF, PSM$_EOF
.EXTRN PSM$_ESCAPE, PSM$_FLOSH
.EXTRN PSM$_FUNNOTSUP, PSM$_INVITMCD
.EXTRN PSM$_INVVMSOSC, PSM$_MODNOTFND
.EXTRN PSM$_NEWPAGE, PSM$_NOFILEID
.EXTRN PSM$_OSCTOOLON, PSM$_PENDING
.EXTRN PSM$_SUSPEND, PSM$_TOOMANYLEV
.EXTRN SMB$_INVSTMNBR, SMB$_INVSTRLEV
.EXTRN SMB$_NOMOREITEMS
.EXTRN PSM$REPORT, SMB$SEND_TO_JOBCTL
.EXTRN PSM$STORE_ERRORS
.EXTRN PSM$HANGUP_DISPATCH_TABLE
.EXTRN SYSSQIO, SYSSGETDVIQ
.EXTRN SYSSQIOW, SYSSCANCEL

```

.PSECT CODE, NOWRT, 2

```

.ENTRY PSM$OUTPUT, Save R2,R3,R4,R5,R6,R7,R8,R9,- 1058
R10,R11
MOVL SYSSQIO, R6
SUBL2 #40, SP
MOVL @FUNCTION, R3
CMPL R3, #9
BLSSU 4$
CMPL R3, #10
BGTRU 4$
MOVL #32, IO_FUNC
MOVL @SMB_CONTEXT, R4
MOVL 20(R4), R2
BBCC #2, 12(R2), 1$
BISB2 #160, 84(R2)
MOVZWL #716, R0
RET
CMPL R3, #10
BNEQ 3$
CMPL 416(R2), #66
BNEQ 2$
MOVZWL #288, IO_FUNC
BRB 3$
MOVL #11, IO_FUNC
MOVL FUNC_DESC, R0
JSB STR$ANALYZE_SDESC_R1
CLRQ -(SP)
CLRQ -(SP)
PUSHL SIZE
PUSHL ADDRESS
PUSHL R4
PUSHAB WRITE_AST
PUSHAB 12(R4)
PUSHL IO_FUNC
PUSHL 396(R2)
CLRL -(SP)
CALLS #12, SYSSQIO

```

		0122	31	00075	BRW	13\$			
	10	53	D1	00078	4\$: CMPL	R3, #16		1108	
		72	12	0007B	BNEQ	6\$			
	52	04	BC	D0	0007D	MOVL	@SMB_CONTEXT, R2	1110	
	50		6E	9E	00081	MOVAB	ITEM_LIST, \$\$ITMBLKPTR	1117	
	80	000B0004	8F	D0	00084	MOVL	#720900, (\$\$ITMBLKPTR)+		
	80	24	AE	9E	0008B	MOVAB	BUFFER+4, (\$\$ITMBLKPTR)+		
			80	D4	0008F	CLRL	(\$\$ITMBLKPTR)+		
	80	00090004	8F	D0	00091	MOVL	#589828, (\$\$ITMBLKPTR)+		
	80	1C	AE	9E	00098	MOVAB	DEVBUFSIZ, (\$\$ITMBLKPTR)+		
			80	7C	0C09C	CLRL	(\$\$ITMBLKPTR)+		
			7E	7C	0009E	CLRL	-(SP)	1120	
			7E	7C	000A0	CLRL	-(SP)		
		10	AE	9F	000A2	PUSHAB	ITEM_LIST		
			7E	D4	000A5	CLRL	-(SP)		
		018C	C2	DD	000A7	PUSHL	396(R2)		
			7E	D4	000AB	CLRL	-(SP)		
00000000G	00		08	FB	000AD	CALLS	#8, SYS\$GETDVIW		
	79		50	E9	000B4	BLBC	STATUS, 8\$		
	20	AE	01A0	C2	90	000B7	MOVB	416(R2), BUFFER	1126
	21	AE	01A4	C2	90	000BD	MOVB	420(R2), BUFFER+1	1127
	22	AE	1C	AE	80	000C3	MOVW	DEVBUFSIZ, BUFFER+2	1128
	27	AE	78	A2	90	000C8	MOVB	120(R2), BUFFER+7	1129
			7E	7C	000CD	CLRL	-(SP)	1132	
			7E	7C	000CF	CLRL	-(SP)		
			08	DD	000D1	PUSHL	#8		
		34	AE	9F	000D3	PUSHAB	BUFFER		
			7E	7C	000D6	CLRL	-(SP)		
	7E		23	7D	000D8	MOVQ	#35, -(SP)		
		018C	C2	DD	000DB	PUSHL	396(R2)		
			7E	D4	000DF	CLRL	-(SP)		
00000000G	00		0C	FB	000E1	CALLS	#12, SYS\$QIOW		
	03		50	E9	000E8	BLBC	STATUS, 5\$		
			0094	31	000EB	BRW	11\$		
			04	000EE	5\$: RET			1134	
	02		53	D1	000EF	6\$: CMPL	R3, #2	1137	
			18	12	000F2	BNEQ	7\$		
7E	04	BC	0000004C	8F	C1	000F4	ADDL3	#76, @SMB_CONTEXT, -(SP)	1140
7E	04	BC	0000018C	8F	C1	000FD	ADDL3	#396, @SMB_CONTEXT, -(SP)	
	0000V	CF		02	FB	00106	CALLS	#2, STOP_PRINTER	
				04	0010B	RET			
	04		53	D1	0010C	7\$: CMPL	R3, #4	1143	
			75	12	0010F	BNEQ	12\$		
	52	04	BC	D0	00111	MOVL	@SMB_CONTEXT, R2	1145	
		20	AE	9F	00115	PUSHAB	DEVDEPEND	1156	
		10	AC	DD	00118	PUSHL	FUNC_DESC		
		01A4	C2	9F	0011B	PUSHAB	420(R2)		
		01A0	C2	9F	0011F	PUSHAB	416(R2)		
		018C	C2	9F	00123	PUSHAB	396(R2)		
	7E		10	AC	7D	00127	MOVQ	FUNC_DESC, -(SP)	
0000V	CF		07	FB	0012B	CALLS	#7, START_PRINTER		
	7A		50	E9	00130	8\$: BLBC	STATUS, 16\$		
000000042	8F	01A0	C2	D1	00133	CMPL	416(R2), #66	1158	
			34	12	0013C	BNEQ	10\$		
	04	21	AE	E8	0013E	BLBS	DEVDEPEND+1, 9\$	1161	
	0C	A2	02	88	00142	BISB2	#2, 12(R2)	1163	
			7E	7C	00146	9\$: CLRL	-(SP)	1171	

50	022C	C2	00000000G	7E	7C	00148	CLRQ	-(SP)	
			00000000G0040	7E	D4	0014A	CLRL	-(SP)	
				8F	C5	0014C	MULL3	#PSM\$S_HANGUP_DISPATCH_ENTRY, 556(R2), R0	
				40	9F	00156	PUSHAB	PSM\$HANGUP_DISPATCH_TABLE[R0]	
				7E	7C	0015D	CLRQ	-(SP)	
		7E	A3	7E	D4	0015F	CLRL	-(SP)	
			018C	8F	9A	00161	MOVZBL	#163, -(SP)	
				C2	DD	00165	PUSHL	396(R2)	
		66		7E	D4	00169	CLRL	-(SP)	
		11		0C	FB	0016B	CALLS	#12, SYS\$QIO	
				50	E8	0016E	BLBS	STATUS, 11\$	
					04	00171	RET		
		01	01A4	C2	D1	00172	10\$:	CMPL	420(R2), #1
				09	12	00177		BNEQ	11\$
04	20	AE		05	E0	00179		BBS	#5, DEVDEPEND, 11\$
	0C	A2		02	88	0017E		BISB2	#2, 12(R2)
		50		01	D0	00182	11\$:	MOVL	#1, R0
					04	00185		RET	
		01		53	D1	00186	12\$:	CMPL	R3, #1
				13	12	00189		BNEQ	14\$
		50	04	8C	D0	0018B		MOVL	@SMB_CONTEXT, R0
			018C	C0	DD	0018F		PUSHL	396(R0)
00000000G		00		01	FB	00193		CALLS	#1, SYS\$CANCEL
		09		50	E8	0019A	13\$:	BLBS	STATUS, 15\$
					04	0019D		RET	
		50	00000000G	8F	D0	0019E	14\$:	MOVL	#PSM\$_FUNNOTSUP, R0
					04	001A5		RET	
		50	00000000G	8F	D0	001A6	15\$:	MOVL	#PSM\$_PENDING, R0
				04	001AD	16\$:		RET	

; Routine Size: 430 bytes, Routine Base: CODE + 0000


```

252 1196 1 %SBTTL 'START PRINTER'
253 1197 1 Functional Description:
254 1198 1 ?desc
255 1199 1
256 1200 1 Formal Parameters:
257 1201 1 ?desc
258 1202 1 Implicit Inputs:
259 1203 1 none
260 1204 1
261 1205 1 Implicit Outputs:
262 1206 1 none
263 1207 1
264 1208 1 Returned Value:
265 1209 1 none
266 1210 1
267 1211 1 Side Effects:
268 1212 1 none
269 1213 1
270 1214 1 ROUTINE START_PRINTER ( %SBTTL 'START_PRINTER'
271 1215 1 DEVICE_NAME,
272 1216 1 DEVICE_STATUS : REF $LONGWORD,
273 1217 1 CHANNEL : REF $WORD,
274 1218 1 DEVICE_CLASS : REF $LONGWORD,
275 1219 1 DEVICE_TYPE : REF $LONGWORD,
276 1220 1 OUT_DEVICE_NAME : ,
277 1221 1 OUT_DEVDEPEND : REF VECTOR
278 1222 1 ) =
279 1223 2 BEGIN
280 P 1224 2 PARAMETER INDEX (DEVICE_NAME, DEVICE_STATUS, CHANNEL,
281 1225 2 DEVICE_CLASS, DEVICE_TYPE, OUT_DEVICE_NAME, OUT_DEVDEPEND);
282 1226 2
283 1227 2 LOCAL
284 1228 2 CHAN : INITIAL (0),
285 1229 2 ITEM_LIST : $ITMLST DECL (ITEMS=4),
286 1230 2 DEVDEPEND : $BBLOCK[4] VOLATILE,
287 1231 2 DEVSTATUS : INITIAL (0),
288 1232 2 DEVCLASS : VOLATILE,
289 1233 2 DEVTYPE : VOLATILE,
290 1234 2 DEVNAMSIZ : INITIAL (0),
291 1235 2 DEVNAMBUF : VECTOR [64, BYTE] VOLATILE,
292 1236 2 STATUS_1 :
293 1237 2
294 1238 2
295 1239 2 MAP
296 1240 2 DEVSTATUS : $BBLOCK;
297 1241 2
298 P 1242 2 $ITMLST INIT (ITMLST=ITEM_LIST,
299 P 1243 2 (BUFADR=DEVDEPEND, ITMCOD=DVIS_DEVDEPEND OR DVISC_SECONDARY),
300 P 1244 2 (BUFADR=DEVCLASS, ITMCOD=DVIS_DEVCLASS OR DVISC_SECONDARY),
301 P 1245 2 (BUFADR=DEVTYPE, ITMCOD=DVIS_DEVTYPE OR DVISC_SECONDARY),
302 P 1246 2 (BUFADR=DEVNAMBUF, ITMCOD=DVIS_FULLDEVNAM OR DVISC_SECONDARY,
303 P 1247 2 BUFSIZ=%ALLOCATION(DEVNAMBUF), RETLEN=DEVNAMSIZ)
304 1248 2 );
305 1249 2
306 1250 2 IF PARAMETER_PRESENT_ (CHANNEL)
307 1251 2 THEN
308 1252 2 CHANNEL[] = 0;

```

```

309 1253 2
310 1254 2 STATUS_1 = $ALLOC (DEVNAM=.DEVICE_NAME);
311 1255 2 IF .STATUS_1 EQL SSS_DEVALRALLOC
312 1256 2 THEN
313 1257 2     STATUS_1 = SSS_DEVALLOC;
314 1258 2 IF NOT .STATUS_1
315 1259 2 THEN
316 1260 2     RETURN .STATUS_1;
317 1261 2
318 1262 2 RETURN_IF_ERROR_ ($ASSIGN (DEVNAM=.DEVICE_NAME, CHAN=CHAN));
319 1263 2
320 1264 2 IF PARAMETER_PRESENT_ (CHANNEL)
321 1265 2 THEN
322 1266 2     CHANNEL[] = .CHAN;
323 1267 2
324 1268 2 RETURN_IF_ERROR_ ($GETDVIW (CHAN=.CHAN, ITMLST=ITEM_LIST));
325 1269 2
326 1270 2 IF PARAMETER_PRESENT_ (OUT_DEVDEPEND)
327 1271 2 THEN
328 1272 2     OUT_DEVDEPEND[0] = .DEVDEPEND;
329 1273 2
330 1274 2 SELECTONE .DEVCLASS OF
331 1275 2     SET
332 1276 2
333 1277 2     [DC$ LP]:
334 1278 2         IF .DEVDEPEND[LP$V_LOWER]
335 1279 2         THEN
336 1280 2             DEVSTATUS[SMBMSG$V_LOWERCASE] = 1;
337 1281 2
338 1282 2     [DC$ TERM]:
339 1283 2         BEGIN
340 1284 2             DEVSTATUS[SMBMSG$V_TERMINAL] = 1;
341 1285 2             IF .DEVDEPEND[TT$V_MODEM]
342 1286 2             THEN
343 1287 2                 IF .DEVDEPEND[TT$V_REMOTE]
344 1288 2                 THEN
345 1289 2                     DEVSTATUS[SMBMSG$V_REMOTE] = 1
346 1290 2                 ELSE
347 1291 2                     RETURN SSS_HANGUP;
348 1292 2             IF .DEVDEPEND[TT$V_LOWER]
349 1293 2             THEN
350 1294 2                 DEVSTATUS[SMBMSG$V_LOWERCASE] = 1;
351 1295 2             END;
352 1296 2
353 1297 2     [OTHERWISE]:
354 1298 2         BEGIN
355 1299 2             RETURN_IF_ERROR_ (STOP_PRINTER (CHANNEL[], .DEVICE_NAME));
356 1300 2             RETURN 0;          !! Better message needed.
357 1301 2         END;
358 1302 2
359 1303 2     TES;
360 1304 2
361 1305 2 IF NOT PARAMETER_PRESENT_ (CHANNEL)
362 1306 2 THEN
363 1307 2     RETURN_IF_ERROR_ (STOP_PRINTER (CHANNEL[], .DEVICE_NAME));
364 1308 2
365 1309 2 IF PARAMETER_PRESENT_ (DEVICE_STATUS)

```

```

366 1310 2 THEN
367 1311 2     DEVICE_STATUS[] = .DEVSTATUS;
368 1312 2
369 1313 2 IF PARAMETER_PRESENT_ (DEVICE_CLASS)
370 1314 2 THEN
371 1315 2     DEVICE_CLASS[] = .DEVCLASS;
372 1316 2
373 1317 2 IF PARAMETER_PRESENT_ (DEVICE_TYPE)
374 1318 2 THEN
375 1319 2     DEVICE_TYPE[] = .DEVTYPE;
376 1320 2
377 1321 2 IF PARAMETER_PRESENT_ (OUT_DEVICE_NAME)
378 1322 2 THEN
379 1323 2     RETURN_IF_ERROR_ (STR$COPY_R (.OUT_DEVICE_NAME, DEVNAMSIZ, DEVNAMBUF));
380 1324 2
381 1325 2     $$$_NORMAL
382 1326 2
383 1327 1 END;

```

.EXTRN SYSS\$ALLOC, SYSS\$ASSIGN

0004 00000 START_PRINTER:

5E	FF7C	CE	9E	00002	.WORD	Save R2	1214
		7E	D4	00007	MOVAB	-132(SP), SP	
		52	D4	00009	CLRL	CHAN	1223
	04	AE	D4	0000B	CLRL	DEVSTATUS	
50	54	AE	9E	0000E	CLRL	DEVNAMSIZ	
80	000B0004	8F	D0	00012	MOVAB	ITEM LIST, \$\$ITMBLKPTR	1248
80	50	AE	9E	00019	MOVL	#720900, (\$\$ITMBLKPTR)+	
		80	D4	0001D	MOVAB	DEVDEPEND, (\$\$ITMBLKPTR)+	
80	00050004	8F	D0	0001F	CLRL	(\$\$ITMBLKPTR)+	
80	4C	AE	9E	00026	MOVL	#327684, (\$\$ITMBLKPTR)+	
		80	D4	0002A	MOVAB	DEVCLASS, (\$\$ITMBLKPTR)+	
80	00070004	8F	D0	0002C	CLRL	(\$\$ITMBLKPTR)+	
80	48	AE	9E	00033	MOVL	#458756, (\$\$ITMBLKPTR)+	
		80	D4	00037	MOVAB	DEVTYPE, (\$\$ITMBLKPTR)+	
80	00E90040	8F	D0	00039	CLRL	(\$\$ITMBLKPTR)+	
80	08	AE	9E	00040	MOVL	#15269952, (\$\$ITMBLKPTR)+	
80	04	AE	9E	00044	MOVAB	DEVNAMBUF, (\$\$ITMBLKPTR)+	
		80	D4	00048	MOVAB	DEVNAMSIZ, (\$\$ITMBLKPTR)+	
03		6C	91	0004A	CLRL	(\$\$ITMBLKPTR)+	
		08	1F	0004D	CMPB	(AP), #3	1250
	0C	AC	D5	0004F	BLSSU	1\$	
		03	13	00052	TSTL	12(AP)	
	0C	BC	B4	00054	BEQL	1\$	
		7E	7C	00057	CLRW	@CHANNEL	1252
		7E	7C	00059	CLRQ	-(SP)	1254
	04	AC	DD	0005B	CLRQ	-(SP)	
00000000G	00	05	FB	0005E	PUSHL	DEVICE NAME	
00000641	8F	50	D1	00065	CALLS	#5, SYSS\$ALLOC	
		05	12	0006C	CML	STATUS_1, #1601	1255
50	0840	8F	3C	0006E	BNEQ	2\$	
35		50	E9	00073	MOVZWL	#2112, STATUS_1	1257
		7E	7C	00076	BLBC	STATUS_1, 4\$	1258
					CLRQ	-(SP)	1262

		08	AE	9F	00078	PUSHAB	CHAN		
		04	AC	DD	0007B	PUSHL	DEVICE NAME		
00000000G	00		64	FB	0007E	CALLS	#4, SYSS\$ASSIGN		
	79		50	E9	00085	BLBC	STATUS, 9\$		
	03		6C	91	00088	CMPB	(AP), #3		1264
			09	1F	00088	BLSSU	3\$		
		0C	AC	D5	0008D	TSTL	12(AP)		
			04	13	00090	BEQL	3\$		
0C	BC		6E	B0	00092	MOVW	CHAN, @CHANNEL		1266
			7E	7C	00096	CLRQ	-(SP)		1268
			7E	7C	00098	CLRQ	-(SP)		
		64	AE	9F	0009A	PUSHAB	ITEM_LIST		
			7E	D4	0009D	CLRL	-(SP)		
		18	AE	DD	0009F	PUSHL	CHAN		
			7E	D4	000A2	CLRL	-(SP)		
00000000G	00		08	FB	000A4	CALLS	#8, SYSS\$GETDVIW		
	6E		50	E9	000AB	BLBC	STATUS, 12\$		
	07		6C	91	000AE	CMPB	(AP), #7		1270
			0A	1F	000B1	BLSSU	5\$		
		1C	AC	D5	000B3	TSTL	2B(AP)		
			05	13	000B6	BEQL	5\$		
1C	BC	50	AE	D0	000B8	MOVL	DEVDEPEND, @OUT_DEVDEPEND		1272
	50	4C	AE	D0	000BD	MOVL	DEVCLASS, R0		1274
00000043	8F		50	D1	000C1	CMPL	R0, #67		1277
			22	13	000C8	BEQL	7\$		
00000042	8F		50	D1	000CA	CMPL	R0, #66		1282
			23	12	000D1	BNEQ	8\$		
	52	40	8F	88	000D3	BISB2	#64, DEVSTATUS		1284
10	52		05	E1	000D7	BBC	#5, DEVDEPEND+2, 7\$		1285
05	51		05	E1	000DC	BBC	#5, DEVDEPEND+1, 6\$		1287
			04	88	000E1	BISB2	#4, DEVSTATUS		1289
			06	11	000E4	BRB	7\$		
		50	8F	3C	000E6	MOVZWL	#716, R0		1291
				04	000EB	RET			
		50	AE	95	000EC	TSTB	DEVDEPEND		1292
			16	18	000EF	BGEQ	10\$		
		52	01	88	000F1	BISB2	#1, DEVSTATUS		1294
			11	11	000F4	BRB	10\$		1274
									1299
		04	AC	DD	000F6	PUSHL	DEVICE NAME		
		0C	AC	DD	000F9	PUSHL	CHANNEL		
0000V	CF		02	FB	000FC	CALLS	#2, STOP PRINTER		
	67		50	E9	00101	BLBC	STATUS, T8\$		
			50	D4	001C4	CLRL	R0		1300
				04	00106	RET			
		03	6C	91	00107	CMPB	(AP), #3		1305
			05	1F	0010A	BLSSU	11\$		
		0C	AC	D5	0010C	TSTL	12(AP)		
			0E	12	0010F	BNEQ	13\$		
		04	AC	DD	00111	PUSHL	DEVICE NAME		1307
		0C	AC	DD	00114	PUSHL	CHANNEL		
0000V	CF		02	FB	00117	CALLS	#2, STOP PRINTER		
	4C		50	E9	0011C	BLBC	STATUS, T8\$		
	02		6C	91	0011F	CMPB	(AP), #2		1309
			09	1F	00122	BLSSU	14\$		
		08	AC	D5	00124	TSTL	8(AP)		
			04	13	00127	BEQL	14\$		
08	BC		52	D0	00129	MOVL	DEVSTATUS, @DEVICE_STATUS		1311

OUTPUT
V04-000

Print Symbiont -- output routines
START_PRINTER

E 12
16-Sep-1984 02:21:40
14-Sep-1984 12:55:12

VAX-11 Bliss-32 V4.0-742
[PRTSMB.SRC]OUTPUT.B32;1

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	04	6C	91	0012D	14\$:	CMPB	(AP), #4	1313
		0A	1F	00130		BLSSU	15\$	
		10	AC	D5	00132	TSTL	16(AP)	
		05	13	00135		BEQL	15\$	
10	BC	4C	AE	D0	00137	MOVL	DEVCLASS, @DEVICE_CLASS	1315
	05	6C	91	0013C	15\$:	CMPB	(AP), #5	1317
		0A	1F	0013F		BLSSU	16\$	
		14	AC	D5	00141	TSTL	20(AP)	
		05	13	00144		BEQL	16\$	
14	BC	48	AE	D0	00146	MOVL	DEVTYPE, @DEVICE_TYPE	1319
	06	6C	91	0014B	16\$:	CMPB	(AP), #6	1321
		18	1F	0014E		BLSSU	17\$	
		18	AC	D5	00150	TSTL	24(AP)	
		13	13	00153		BEQL	17\$	
		08	AE	9F	00155	PUSHAB	DEVNAMBUF	1323
		08	AE	9F	00158	PUSHAB	DEVNAMSIZ	
		18	AC	DD	0015B	PUSHL	OUT_DEVICE_NAME	
00000000G	00	03	FB	0015E		CALLS	#3, -STR\$COPY_R	
	03	50	E9	00165		BLBC	STATUS, 18\$	
	50	01	D0	00168	17\$:	MOVL	#1, R0	1327
		04	0016B	18\$:	RET			

; Routine Size: 364 bytes, Routine Base: CODE + 01AE

```

385 1328 1 %SBTTL 'STOP_PRINTER'
386 1329 1 Functional Description:
387 1330 1 ?desc
388 1331 1
389 1332 1 Formal Parameters:
390 1333 1 ?desc
391 1334 1 Implicit Inputs:
392 1335 1 none
393 1336 1
394 1337 1 Implicit Outputs:
395 1338 1 none
396 1339 1
397 1340 1 Returned Value:
398 1341 1 none
399 1342 1
400 1343 1 Side Effects:
401 1344 1 none
402 1345 1 --
403 1346 1 ROUTINE STOP_PRINTER (
404 1347 1 CHANNEL : REF $WORD,
405 1348 1 DEVICE_NAME
406 1349 1 ) =
407 1350 2 BEGIN
408 1351 2
409 1352 2 LOCAL
410 1353 2 STATUS_1,
411 1354 2 STATUS_2
412 1355 2 ;
413 1356 2
414 1357 2 STATUS_1 = $DASSGN (CHAN=.CHANNEL[]);
415 1358 2
416 1359 2 CHANNEL[] = 0;
417 1360 2
418 1361 2 STATUS_2 = $DALLOC (DEVNAM=.DEVICE_NAME);
419 1362 2
420 1363 2 IF NOT .STATUS_1
421 1364 2 THEN
422 1365 2 RETURN .STATUS_1;
423 1366 2
424 1367 2 .STATUS_2
425 1368 2
426 1369 1 END;

```

.EXTRN SYSSDASSGN, SYSSDALLOC

				0004 00000 STOP_PRINTER:		
				.WORD	Save R2	
				MOVZWL	@CHANNEL, -(SP)	: 1346
00000000G	7E	04	BC 3C 00002	CALLS	#1, SYSSDASSGN	: 1357
	00		01 FB 00006	MOVL	R0, STATUS_1	
	52		50 D0 0000D	CLRW	@CHANNEL	: 1359
		04	BC B4 00010	CLRL	-(SP)	: 1361
			7E D4 00013	PUSHL	DEVICE_NAME	
00000000G	00	08	AC DD 00015	CALLS	#2, SYSSDALLOC	
	03		02 FB 00018	BLBS	STATUS_1, 1\$: 1363
			52 E8 0001F			


```
Print_Symbiont -- output routines
STOP_PRINTER
```

```

G 12
16-Sep-1984 02:21:40      VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:55:12      [PRTSMB.SRC]OUTPUT.B32;1

```

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52

DO 00022
04 00025

15:

```

MOVL
RET

```

STATUS_1, R0

: 1365
: 1369

; Routine Size: 38 bytes, Routine Base: CODE + 031A

SEP
V04

.....

```

: 428 1370 1 XSBTTL 'WRITE_AST'
: 429 1371 1 Functional Description:
: 430 1372 1 ?desc
: 431 1373 1
: 432 1374 1 Formal Parameters:
: 433 1375 1 ?desc
: 434 1376 1 Implicit Inputs:
: 435 1377 1 none
: 436 1378 1
: 437 1379 1 Implicit Outputs:
: 438 1380 1 none
: 439 1381 1
: 440 1382 1 Returned Value:
: 441 1383 1 none
: 442 1384 1
: 443 1385 1 Side Effects:
: 444 1386 1 none
: 445 1387 1 --
: 446 1388 1 ROUTINE WRITE_AST (
: 447 1389 1 IOB : REF $BBLOCK
: 448 1390 1 ) : NOVALUE =
: 449 1391 2 BEGIN
: 450 1392 2
: 451 1393 2 LOCAL
: 452 1394 2 FUNCTION_STATUS
: 453 1395 2 ;
: 454 1396 2
: 455 1397 2 FUNCTION_STATUS = .IOB[IOB_W_IO_STATUS];
: 456 1398 2
: 457 1399 2 PSM$REPORT (IOB, FUNCTION_STATUS);
: 458 1400 2
: 459 1401 1 END;

```

0000 00000 WRITE_AST:						
				.WORD	Save nothing	: 1388
50	04	AC	D0 00002	MOVL	IOB, R0	: 1397
7E	0C	A0	3C 00006	MOVZWL	12(R0), FUNCTION_STATUS	
		5E	DD 0000A	PUSHL	SP	: 1399
	04	AC	9F 0000C	PUSHAB	IOB	
00000000G	00	02	FB 0000F	CALLS	#2, PSM\$REPORT	
		04	00016	RET		: 1401

; Routine Size: 23 bytes, Routine Base: CODE + 0340

: 461
: 462
: 1402 1 END
: 1403 0 ELUDOM

PSECT SUMMARY		
Name	Bytes	Attributes
CODE	855	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics					
File	----- Symbols -----		Pages Mapped	Processing	
	Total	Loaded Percent		Time	
_\$255\$DUA28:[SYSLIB]LIB.L32;1	18619	76 0	1000	00:01.8	

:
: COMMAND QUALIFIERS
: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:OUTPUT/OBJ=OBJ\$:OUTPUT MSRC\$:OUTPUT/UPDATE=(ENH\$:OUTPUT)
: Size: 855 code + 0 data bytes
: Run Time: 00:26.6
: Elapsed Time: 00:58.1
: Lines/CPU Min: 3170
: Lexemes/CPU-Min: 32415
: Memory Used: 284 pages
: Compilation Complete

0310 AH-BT13A-SE
VAX/VMS V4.0

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